

Appl. No.: 10/088,730
Group Art Unit: 1751
Applicants' Reply to Paper No. 5

REMARKS

Claims 21-44 are currently pending in the present application.

The Specification has been amended to remove a translational omission, i.e., “[lacuna]” at page 10, line 34, and replace the transcription term with the original term —which—. It is submitted that the amendment to the Specification made herein introduces no new matter. The new paragraph has been added in accordance with 37 C.F.R. §1.121(b)(1)(i) & (iii), and the paragraph deletion indicated in accordance with 37 C.F.R. §1.121(b)(1)(i) & (iv). Entry of the amendment to the Specification made herein is therefore proper and respectfully requested.

Claims 35 and 36 have been amended herein for grammatical clarity by adding the definite article “the” prior to the term “at least one alk(en)yl”, as requested by the Examiner. Claim 40 has been amended to correct the dependency thereof, thus correcting a lack of antecedent basis, as requested by the Examiner. No new matter has been introduced. A complete listing of all claims ever presented is included herein in accordance with 37 C.F.R. §1.121(c). Entry of the amendments to claims 35, 36 and 40 is therefore proper and respectfully requested.

In Paper No. 5, the Examiner objects to claims 34 and 35 because the definite article, “the”, does not precede the previously introduced claim term “at least one alk(en)yl”. Applicants respectfully note that the claims from which “the” was missing were claims 35 and 36, not 34 and 35. Applicants have amended claims 35 and 36 to more properly refer to “the at least one alk(en)yl”. Accordingly, reconsideration and withdrawal of the objection are respectfully requested.

In Paper No. 5, the Examiner rejects claim 40 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim that which Applicants regard as their invention. Specifically, the Examiner states that there is insufficient antecedent basis for the claim term “the mixture of linear alcohols” because the claim depends from claim 37 rather than claim 39. Applicants have amended claim 40 to depend from claim 39, rather than claim 37, thus correcting the lack of antecedent basis. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Appl. No.: 10/088,730
 Group Art Unit: 1751
 Applicants' Reply to Paper No. 5

In Paper No. 5, the Examiner rejects claims 21-26, 32-33 and 35-44 under 35 U.S.C. §102(b), as being anticipated by U.S. Pat. No. 5,602,093 of Haerer, *et al.* (hereinafter referred to as "Haerer"). Specifically, the Examiner contends that Haerer discloses a dishwashing rinse aid composition comprising an alkyl polyglycoside and an alkyl polyglycol ether. The Examiner also notes Example 11 of Haerer and contends that the Example discloses a composition containing 8% by weight of an alkyl polyglycoside, 7% by weight of a C₁₂₋₁₈ alkyl polyglycol ether and 2% by weight of a fatty alcohol ethoxylate. On this basis the Examiner argues that the claims are anticipated.

Applicants respectfully traverse the Examiner's rejection and the contentions set forth in support thereof for the following reason. In order for a rejection under 35 U.S.C. §102 to be proper, each and every element of the claimed invention must be taught, either expressly or inherently, in a single prior art reference. (See, e.g., M.P.E.P. §2131). Applicants submit that Haerer fails to teach each and every element of the claimed invention.

Applicants' claimed invention is directed to surfactant mixtures comprising: (a) a *nonionic surfactant mixture present in an amount greater than 60% by weight, based on the weight of the surfactant mixture*, the nonionic surfactant mixture comprising:

(i) at least one alk(en)yl oligoglycoside of the general formula (I),



wherein R¹ represents an alk(en)yl radical having from 4 to 22 carbon atoms, G represents a sugar radical having 5 or 6 carbon atoms and p represents a number from 1 to 10; and

(ii) at least one nonionic surfactant of the general formula (II)



wherein x represents a number of from 1 to 30, each R independently represents a substituent selected from the group consisting of a hydrogen, a methyl group and an ethyl group, and R² represents a linear alkyl radical having from 16 to 22 carbon atoms; and (b) up to 6% by weight, based on the weight of the surfactant mixture, of one or more anionic surfactants.

Applicants submit that Haerer fails to teach a surfactant mixture comprising a nonionic surfactant mixture present in an amount greater than 60% by weight, wherein the

Appl. No.: 10/088,730
Group Art Unit: 1751
Applicants' Reply to Paper No. 5

nonionic surfactant mixture comprises: (i) at least one alk(en)yl oligoglycoside of the general formula (I); and (ii) at least one nonionic surfactant of the general formula (II) wherein the R² group in formula (II) represents a linear alkyl radical having from 16 to 22 carbon atoms.

Haerer discloses a surfactant mixture containing 8% by weight of an alkyl polyglycoside. (See, Haerer, Table 1). The same composition also contains 7% by weight of a C₁₂₋₁₈ fatty alcohol ethoxylate and 2% by weight of a "fatty alcohol" ethoxylate. (See, *id.*). However, Haerer fails to disclose the amount of fatty alcohol ethoxylate having C₁₆₋₂₂ alkyl groups. Other than the reference to a "C₁₂₋₁₈ alkyl + 4EO" in Table 1, there is no indication as to how much C₁₆₋₂₂ ethoxylate might be present. Given that Haerer is completely silent as to the exact amount of C_{16-C22} alkyl groups present in either ethoxylate in Table 1, it is impossible to determine whether the composition of Example 11 reads on the claimed composition which requires at least 60% of a nonionic surfactant mixture comprising at least one alkyl polyglycoside and at least one C_{16-C22} alcohol alkoxylate.

Accordingly, Applicants submit that Haerer fails to teach each and every element of the claimed invention, and thus, Haerer fails to anticipate the claimed invention.

Reconsideration and withdrawal of the rejection based upon Haerer are respectfully requested.

In Paper No. 5, the Examiner rejects claims 21, 23, 26, 35, 37, 39 and 41-44 under 35 U.S.C. §102(e), as being anticipated by U.S. Pat. No. 6,551,976 of Smith, *et al.* (hereinafter referred to as "Smith"). Specifically, the Examiner contends that Smith discloses a laundry detergent composition containing a linear fatty alcohol ethoxylate, an alkyl polyglycoside and an alkyl ether sulfate, specifically noting Example 1 of Smith. On this basis, the Examiner argues that the claims are anticipated.

Applicants respectfully traverse the Examiner's rejection and the contentions set forth in support thereof for the following reason. Applicants submit that Smith fails to teach each and every element of the claimed invention.

Smith discloses a surfactant composition which contains a linear alcohol ethoxylate, an ether sulfate and an alkyl polyglycoside, wherein all three components have a C_{12/14/16} coconut fatty alcohol midcut hydrophobic group. Smith does not disclose what

Appl. No.: 10/088,730
Group Art Unit: 1751
Applicants' Reply to Paper No. 5

portion of the coconut fatty alcohol midcut ethoxylate may or may not be based upon C₁₆ to C₂₂ alkyl groups. Thus, it is not clear whether any formulation disclosed in Smith contains at least 60% by weight of a nonionic mixture of an alkyl polyglycoside and a C₁₆₋₂₂ alcohol alkoxylate. Without such disclosure, it cannot be said that Smith teaches the claimed amount of the claimed nonionic mixture.

Accordingly, Applicants submit that Smith fails to teach each and every element of the claimed invention, and thus, Smith fails to anticipate the claimed invention. Reconsideration and withdrawal of the rejection based upon Smith are respectfully requested.

In Paper No. 5, the Examiner rejects claims 21, 23, 26, 35, 37, 39 and 41-44 under 35 U.S.C. §102(b), as being anticipated by U.S. Pat. No. 5,370,816 of Balzer, et al. (hereinafter referred to as "Balzer"). The Examiner contends that Balzer discloses a detergent composition comprising a fatty alcohol ethoxylate and an alkyl polyglycoside, specifically noting the Examples in Tables 1 and 2. On this basis, the Examiner argues that the claims are anticipated.

Applicants respectfully traverse the Examiner's rejection and the contentions set forth in support thereof for the following reason. Applicants submit that Balzer fails to teach each and every element of the claimed invention.

Balzer discloses a machine detergent formulation containing 3 to 30% of a mixture of short and long chain alkyl polyglycosides, 3 to 30% of one or more fatty alcohol ethoxylates and 5 to 30% of one or more soaps. The Examples cited by the Examiner disclose combinations of alkylpolyglycosides and C_{12/14} alkenol ethoxylates (*i.e.*, the MARLIPAL® products). Thus, as with the other references, there is no teaching of a surfactant mixture comprising at least 60% by weight of a nonionic mixture comprised of one or more alkyl polyglycosides and one or more C₁₆₋₂₂ alcohol alkoxylates.

Moreover, the compositions according to Balzer, as exemplified in Tables 1 and 2 contain 10% by weight of a soap, based on a total surfactant content of approximately 40% by weight. Thus, the soap accounts for about 25% of the total surfactant mixture. Applicants' claimed composition comprises up to 6% of one or more anionic surfactants. Soaps are the

Appl. No.: 10/088,730
Group Art Unit: 1751
Applicants' Reply to Paper No. 5

sodium salts of carboxylates (*i.e.*, anions). Thus, the compositions disclosed in Balzer fail to read on the anionic element of the claimed invention.

Accordingly, Applicants submit that Balzer fails to teach each and every element of the claimed invention, and thus, Balzer fails to anticipate the claimed invention.

Reconsideration and withdrawal of the rejection based upon Balzer are respectfully requested.

In Paper No. 5, the Examiner provisionally rejects claims 21, 23-26, 35, 37 and 39-44 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 11-31 of copending application number 10/027,447. The Examiner contends that while the conflicting claims are not identical, they are not patentably distinct because they claim similar detergent compositions.

Applicants respectfully traverse the Examiner's rejection and the contentions set forth in support thereof for the following reasons. The copending application claims a detergent composition comprising a surfactant mixture containing at least one of a specific, narrow set of C₁₆-18 alkyl ethoxylates, wherein the degree of ethoxylation is from 5 to 10; and a co-surfactant, which may be an alkyl oligoglycoside. There is no requirement in the claims of the copending application that such a mixture of nonionics be present in an amount of at least 60% by weight based upon the total surfactant content. There is no requirement as to the amount of anionic surfactant which may be present.

In contrast, Applicants' claimed invention is directed to a different group of alcohol alkoxylates combined with one or more alkyl polyglycosides with a minimum required amount of the nonionic mixture and a maximum allowable amount of anionic surfactant.

Applicants respectfully submit that the instant claims are not obvious in view of the claims of the copending application. Accordingly, reconsideration and withdrawal of the provisional rejection under the judicially created doctrine of obviousness-type double patenting are requested.

In view of the amendments made herein, Applicants submit that the claims are no longer objectionable and fully comply with 35 U.S.C. §112, and that in view of the comments set forth above, Applicants submit that all pending claims patentably distinguish over the prior art of

Appl. No.: 10/088,730
Group Art Unit: 1751
Applicants' Reply to Paper No. 5

record and known to Applicants, either alone or in combination. Accordingly, reconsideration, withdrawal of the rejections and a Notice of Allowance for all pending claims are respectfully requested.

Respectfully submitted,
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